Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for the *in vitro* diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate, ~~characterized in that it comprises~~comprising:

_____~~the step consisting of detection~~detecting, in a biological sample from a patient suspected of suffering from a benign pathology of the prostate or from an adenocarcinoma of the prostate, ~~of~~ the activatable free form of PSA.

2. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 1, comprising:

i) bringing a binding partner capable of binding specifically to activatable free PSA into contact with a biological sample from a patient suspected of suffering from a benign pathology of the prostate or of an adenocarcinoma of the prostate,

ii) demonstrating the capture of the activatable free form of PSA by said binding partner,

iii) calculating the ratio of the amount of activatable free form of PSA detected in step ii) to the amount of a form of PSA other than the activatable free form, present in a sample of the same nature taken from the same individual, and

iv) determining whether the patients are suffering from an adenocarcinoma of the prostate or from a benign pathology of the prostate by comparing the value of the ratio determined in step iii) with a predetermined threshold value, chosen according to the type of ratio used and representative of the detection limit of each pathology.

3. (Currently Amended) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein said binding

partner used in step i) is capable of recognizing the epitope mimicked by the sequence SEQ ID No. 1

4. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein said binding partner used in step i) is an antibody or an antibody fragment.

5. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein the demonstration of the capture of the activatable free form of PSA by said binding partner is carried out by indirect detection by means of a detection partner, preferably using an anti-total PSA antibody.

6. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein the demonstration of the capture of the activatable free form of PSA by said binding partner is carried out by determining the enzymatic activity of the immunopurified and activated, activatable free form of PSA.

7. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein it uses, in addition to the binding partner capable of binding specifically to activatable free PSA, an antibody capable of increasing the enzymatic activity of PSA.

8. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 2, wherein the form of PSA other than the activatable free form used for calculating the ratio is the inactive free form of PSA or the cleaved and denatured free forms of PSA.

9. (Previously Presented) A diagnostic kit for diagnosing an adenocarcinoma of the prostate or a benign pathology of the prostate, comprising:

- a binding partner capable of binding specifically to activatable free PSA, and

- means for assaying the forms of PSA other than the activatable free form.

10. (Previously Presented) The diagnostic kit as claimed in claim 9, wherein said binding partner is capable of recognizing the epitope mimicked by the sequence SEQ ID No. 1, preferably an antibody or an antibody fragment.

11. (Previously Presented) The diagnostic kit as claimed in claim 9, wherein said means are antibodies or antibody fragments.

12. (Previously Presented) A conjugate consisting of a binding partner capable of binding specifically to activatable free PSA and of the activatable free form of PSA.

13. (Previously Presented) The conjugate as claimed in claim 12, wherein said binding partner is capable of recognizing the epitope mimicked by the sequence SEQ ID No. 1.

14. (Previously Presented) The conjugate as claimed in claim 12, wherein the activatable free form of PSA is activated.

15. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 1, comprising:

i) bringing a binding partner capable of binding to activatable free PSA in a nonspecific manner into contact with a biological sample from a patient suspected of suffering from a benign pathology of the prostate or from an adenocarcinoma of the prostate,

ii) demonstrating the capture of the activatable free form of PSA by said binding partner by determining the enzymatic activity of the activatable free form of PSA, after activation of the activatable free form of PSA,

iii) calculating the ratio of the amount of activatable free form of PSA detected in step ii) to the amount of a form of PSA other than the activatable free form, present in a sample of the same nature taken from the same individual, and

iv) determining whether the patients are suffering from an adenocarcinoma of the prostate or from a benign pathology of the prostate by comparing the value of the ratio determined in step iii) to a predetermined threshold value, chosen according to the type of ratio used and representative of the detection limit of each pathology.

16. (Previously Presented) The method for the diagnosis of a benign pathology of the prostate or of an adenocarcinoma of the prostate as claimed in claim 15, wherein the activation of the activatable free form of PSA is carried out using an antibody capable of increasing the enzymatic activity of PSA.